

260

11



OIPE

RAW SEQUENCE LISTING

DATE: 08/22/2002

PATENT APPLICATION: US/09/938,035B

TIME: 16:26:13

Input Set : A:\SeqList120940.txt

Output Set: N:\CRF4\08222002\I938035B.raw

ENTERED

3 <110> APPLICANT: Roche Vitamins AG
 5 <120> TITLE OF INVENTION: Microbial process for producing L-ascorbic acid and D-
 erythorbic acid
 7 <130> FILE REFERENCE: Alicyclobacillus NA20, 21, FJ21 16S nuc
 9 <140> CURRENT APPLICATION NUMBER: US 09/938,035B
 C--> 10 <141> CURRENT FILING DATE: 2002-08-16
 12 <150> PRIOR APPLICATION NUMBER: EP Application No. 00118059.5
 13 <151> PRIOR FILING DATE: 2000-08-23
 15 <160> NUMBER OF SEQ ID NOS: 3
 17 <170> SOFTWARE: PatentIn version 3.1
 19 <210> SEQ ID NO: 1
 20 <211> LENGTH: 1529
 21 <212> TYPE: DNA
 22 <213> ORGANISM: Alicyclobacillus sp.
 24 <220> FEATURE:
 25 <221> NAME/KEY: rRNA
 26 <222> LOCATION: (1)..(1529)
 27 <223> OTHER INFORMATION: NA-20 partial 16SrRNA gene sequence
 30 <220> FEATURE:
 31 <221> NAME/KEY: misc_feature
 32 <222> LOCATION: (1)..(1529)
 33 <223> OTHER INFORMATION: n can be a or t or g or c
 36 <400> SEQUENCE: 1

37 agagtttgat	cctggctca	gacgaacgct	ggcggcgtgc	ctaatacatg	caagtcgagc	60
39 gggctcttc	ggaggccagc	ggcggacggg	tgaggaacac	gtggtaatc	tgccttcag	120
41 gccgaataa	cgcggaaa	cggcgctaa	tgccggatac	gcccgcgagg	aggcatcttc	180
W--> 43 ttgcggggga	aggccaaatt	ggccgctga	gagaggagcc	cgcggcgcat	tagctngttg	240
45 gcgggtaac	ggcccaccaa	ggcgacgatg	cgtagccgac	ctgagagggt	gaccggccac	300
47 actggactg	agacacggcc	cagactccta	cgggaggcg	cagttagggaa	tttccgcaa	360
49 tggcgcaag	cctgacggag	caacgcccgc	tgagcgaaga	aggccttcgg	gttgtaaagc	420
51 tctgttgc	ggggagagcg	gcatggggaa	tggaaagccc	catgcgagac	gttaccgagt	480
53 gaggaagccc	cggctaacta	cgtgccagca	gcccggtaa	aacgttaggg	gcgagcgttg	540
55 tccgaatca	ctggcgtaa	agggtgcgt	ggcggtcgag	caagtctgga	gtgaaagtcc	600
57 atgctcaac	catggatgg	cttggaaac	tgcctgactt	gagtgcgtt	gaggcaaggg	660
59 gaattccacg	tgtagcgtt	aatgcgtt	agatgtggag	aataccagt	ggcgaaggcg	720
61 cttgtcttga	cagtacttga	cgttggca	cgaaagctt	gggagcaaac	aggatttagat	780
63 accctggtag	tccacggcg	aaacgttgg	tgcgttgg	tttgcgttgg	tttgcgttgg	840
65 cccaggaaa	cccaataa	actccgcctt	gggagttttt	tgcgttgg	tttgcgttgg	900
67 ggaatttgc	ggggcccgca	caagcgttgg	tttgcgttgg	tttgcgttgg	tttgcgttgg	960
W--> 69 gaaccttacc	agggttgc	atcccttctt	cacnctcaga	gatgtttttt	cccttcgggg	1020
71 cagaggagac	agggttgc	tgttgcgt	cagctgtt	cgttgcgtt	tttgcgttgg	1080
73 ccccaacga	gcgcacccct	tgcctgtt	taccagcg	tttgcgttgg	tttgcgttgg	1140
75 tgactgc	cgttgcgtt	tttgcgttgg	tttgcgttgg	tttgcgttgg	tttgcgttgg	1200
77 tcctggctt	cacacgttgc	acaatggcg	tttgcgttgg	tttgcgttgg	tttgcgttgg	1260

RAW SEQUENCE LISTING DATE: 08/22/2002
PATENT APPLICATION: US/09/938,035B **TIME:** 16:26:13

Input Set : A:\SeqList120940.txt
Output Set: N:\CRF4\08222002\I938035B.raw

79 gcgaaaccca aaaagccgt cgtagttcgg attgcaggct gcaactcgcc tgcataaaggc 1320
 81 cggaaattgtt agtaatcgcc gatcagcatg ccgcggtaaa tacgttcccg ggccttgatc 1380
W--> 83 acaccgcccc tcacaccacg agagtcggca acaccgaag tcggtaggt aaccctnng 1440
 85 gggagccagc cgccgaagggt ggggtcgatg attggggtaa agtctaaca aggtagccgt 1500
 87 accggaaggt gcggctggat cacccctt 1529
 90 <210> SEQ ID NO: 2
 91 <211> LENGTH: 1529
 92 <212> TYPE: DNA
 93 <213> ORGANISM: Alicyclobacillus sp.
 95 <220> FEATURE:
 96 <221> NAME/KEY: rRNA
 97 <222> LOCATION: (1)..(1529)
 98 <223> OTHER INFORMATION: NA-21 Partial 16SrRNA gene
 101 <220> FEATURE:
 102 <221> NAME/KEY: misc_feature
 103 <222> LOCATION: (1)..(1529)
 104 <223> OTHER INFORMATION: n can be a or t or g or c
 107 <400> SEQUENCE: 2
 108 agagtttgat cctggctcaag gacgaacgct ggcggcgatc ctaatacatg caagtgcggc 60
 110 gggctcttc ggaggccagc ggcggacggg tgaggaacac gtggtaatc tgccttc 120
 112 gcccggataaa cggccggaaa cggccgctaa tgccggatac gcccggagg aggcatcttc 180
W--> 114 ttgcggggga aggcccaatt ggccactga gagaggagcc cgccgcgtat tagctngtt 240
 116 gccccgttaac gcccccaccaa ggcgacgatg cgtagccgac ctgagagggt gaccggccac 300
 118 actgggactg agacacggcc cagactccta cgggaggccag cagtagggaa tcttccgcaa 360
 120 tgggcgcaag cctgacggag caacggccgg tgagcgaaga aggcttcgg gttgtaaagc 420
 122 tctgttgctc ggggagagcg gcatggggtaa tgaaaaggcc catgcccggatc ggtaccgagt 480
 124 gagaaagccc cggcttaacta cgtgccagca gccggtaa aacgttaggg gcgagcggt 540
 126 tccggaatca ctgggcgtaa agggtcgtt ggcggcgatc caagtctggatc gtgaaagtcc 600
 128 atggctcaac catgggatgg ctggggaaac tgcttgactt gagtgctggatc gaggcaagg 660
 130 gaattccacg tggatggatgg aaatgcgtt agatgtggatc gaataccatc ggcgaaggcg 720
 132 cttgtcttggatc cagtactgtt cgttggatgg cgttggatgg aacatggatc gggatggatc 780
 134 accctggtag tccacggccgtt aaacatggatc tgcttaggtt tggggggaca caccggatc 840
 136 ccgaaggaaa cccataaaacg actccggctt gggatggatc tcgcaagact gaaactcaaa 900
 138 ggaatttgcgtt gggggccggca caagcgtt gggatggatc tttttttttt gcaacggcg 960
 140 gaaaccttacc agggcttgcgtt atccctctgtt caccctcaga gatgggggtt cccttcgggg 1020
 142 cagaggagac aggtgggtgtt tgggtgtgtt cagctcgatc cgttggatgtt tgggttctgtt 1080
 144 cccggcaacgtt ggcggatggatc tgactgtgtt taccagccgtt ttggggggatc gactcacagg 1140
 146 tggatggatc cgttggatggatc aggtggatggatc tttttttttt gcaacggcg 1200
 148 tccctggatc cacacgtgtt acaatggggcg gggatggatggatc tggggggatc gggatggatc 1260
 150 gcgaaaccca aaaagccgtt cgttagttggatc tttttttttt gcaactcgcc tgcataaaggc 1320
 152 cggaaattgtt agtaatcgcc gatcagcatg ccgcggtaaa tacgttcccg ggccttgatc 1380
 154 acaccgcccc tcacaccacg agagtcggca acaccgaag tcggtaggt aaccctnng 1440
 156 gggagccagc cgccgaagggt ggggtcgatg attggggtaa agtctaaca aggtagccgt 1500
 158 accggaaggt gcggctggat cacccctt 1529
 161 <210> SEQ ID NO: 3
 162 <211> LENGTH: 1495
 163 <212> TYPE: DNA
 164 <213> ORGANISM: Alicyclobacillus sp.
 166 <220> FEATURE:

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/938,035B

DATE: 08/22/2002

TIME: 16:26:13

Input Set : A:\SeqList120940.txt

Output Set: N:\CRF4\08222002\I938035B.raw

167 <221> NAME/KEY: rRNA
 168 <222> LOCATION: (1)..(1495)
 169 <223> OTHER INFORMATION: FJ-21 Partial 16SrRNA gene sequence
 172 <220> FEATURE:
 173 <221> NAME/KEY: misc_feature
 174 <222> LOCATION: (1)..(1495)
 175 <223> OTHER INFORMATION: n can be a or t or g or c
 178 <400> SEQUENCE: 3

179	aggacgaacg	ctggccgcgt	gcctaataca	tgcaagtcga	gcggacctct	tctgaggta	60
181	gccccggacg	ggtgaggaac	acgtggtaa	tctgccttgc	agaccgaaat	aacgcccggaa	120
183	aacggggcgct	aatgcggat	acgcccgcga	ggaggcatct	tcttgcgggg	aaaggccccgaa	180
W--> 185	ttggggcgct	gagagaggag	cccgccggcgc	attagctngt	tggcggggta	acggccacc	240
187	aaggcgacga	tgcgttagccg	acctgagagg	gtgaccggcc	acactgggac	tgagacacgg	300
189	cccgactcc	tacgggaggc	agcagtaggg	aatctccgc	aatgggcgcga	agcctgacgg	360
191	agcaacgcgg	cgtgagcga	gaaggcccttc	gggttgtaaa	gctctgttgc	tcggggagag	420
193	cggcatgggg	agtggaaagc	cccatgcgag	acggtaccga	gtgaggaagc	cccgctaac	480
195	tacgtgccag	cagccgcgg	aaaacgtagg	gggcgagcgt	tgtccggaaat	cactgggcgt	540
197	aaagggtgcg	taggcccgt	agcaagtctg	gagtggaaat	ccatggctca	accatgggat	600
199	ggctctggaa	actgcgttgc	ttgagtgtcg	gagaggcaag	ggaaattcca	cgtgtagcgg	660
201	tggaaatgcgt	agagatgtgg	aggaataccca	gtggcgaagg	cgccttgctg	gacagtgtact	720
203	gacgctgagg	cacgaaagcg	tggggagcaa	acaggattag	ataccctgtt	agtccacgccc	780
205	gttaaacatcg	agtgcgttgt	gttgggggg	cacaccccg	tgcgcggaa	aacccaataaa	840
207	gcactccgc	tggggagttac	ggtcgcaaga	ctgaaactca	aaggaaattga	cggggcccg	900
209	cacaaggcgt	ggagcatgt	gtttaattcg	aagcaacgcg	aagaacctta	ccagggttt	960
211	acatccctct	gacgggtgca	gagatgcacc	ttcccttcgg	ggcagaggag	acaggtggtg	1020
213	catgggtgtc	gtcagtcgt	gtcgtgagat	gttgggttca	gtcccgcaac	gagcgaacc	1080
W--> 215	cttgacactgt	gttaccagcg	cgntanggg	gggactcaca	ggtgactgcc	ggcgtaagtc	1140
217	ggaggaaggc	ggggatgacg	tcaaatcatc	atgccttgc	tgtccctggc	tacacacgtg	1200
219	ctacaatggg	cggtacaaag	ggaggcgaag	ccgcgaggcg	gagcggaaacc	caaaaagccg	1260
221	ctcgttagtc	ggattgcagg	ctgcaactcg	cctgcgttgc	ggccggaaat	ctagtaatcg	1320
223	cggatcagca	tgccgcgg	aatacgttcc	cgggccttgc	acacaccgg	ogtcacacca	1380
225	cgagagtcgg	caacacccga	agtcgggtgag	gttgggttca	gtcccgcaac	gagcgaacc	1440
227	gttgggttca	atgattgggg	tgaagtcgt	acaaggtagc	cgtaccggaa	ggtgc	1495

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 08/22/2002
PATENT APPLICATION: US/09/938,035B TIME: 16:26:14

Input Set : A:\SeqList120940.txt
Output Set: N:\CRF4\08222002\I938035B.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 236,994,1438,1439
Seq#:2; N Pos. 236
Seq#:3; N Pos. 218,1103,1106